

AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0001] with the following:

[0001] This application is related to Patent Application, Serial Number 10/712,593 (~~attorney docket number TI-34776~~), which is incorporated herein in its entirety for all purposed by this reference.

Please replace paragraph [0019] with the following:

[019] Figure 1 is a schematic block diagram illustrating an example of a complex filter arrangement according to one embodiment~~the practice~~ of the invention;

Please replace paragraph [0021] with the following:

[021] Figure 3 is a schematic block diagram of an example of an I/Q top-level MTDSM architecture for performing complex filtering~~circuit demonstrating the practice of the invention~~;

Please replace paragraph [0027] with the following:

[027] Referring primarily to Figure 1, the methods of the invention are portrayed in a block diagram in which it can be seen that rotation of a switched capacitor C_R between the I and Q channels of the circuit causes a sharing of the charge among the four paths, I+, I-, Q+, Q-, resulting in a direct sampling and a complex filtering arrangement 10. The preferred embodiment of the filter 10 shown can be seen to have four sub-circuits 12, 14, 16, 18, which may be understood as single-pole IIR filters. Understanding of the present invention may be enhanced by an overview of the workings of one such sub-circuit 12 of

the filter 10. A more detailed explanation of the filtering methods and exemplary sub-circuits 12, 14, 16, 18 may be found in Patent Application, Serial Number 10/712,593 (~~attorney docket number TI-34776~~), which is incorporated herein in its entirety for all purposes by reference.

Please replace paragraph [0040] with the following:

~~[0040]~~ Disclosed are methods, circuits and systems for image reject filtering in a multi-tap direct sampling mixer (MTDSM) of an IF or RF system. Disclosed is the use of rotating capacitors among the in-phase and quadrature branches of a signal processing system. The exchange of information among the branches of the I and Q channels is used in the implementation of a complex filter. Embodiments using cascaded multiple stages of the complex filter to provide higher order complex filters are also disclosed.